



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/518,230

07/01/2005

Mark Graeme Keen

47968

6678

1609 7590 06/27/2008

ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.
1300 19TH STREET, N.W.
SUITE 600
WASHINGTON,, DC 20036

EXAMINER

CIRIC, LJILJANA V

ART UNIT

PAPER NUMBER

3744

MAIL DATE

DELIVERY MODE

06/27/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/518,230	Applicant(s) KEEN, MARK GRAEME	
	Examiner Ljiljana (Lil) V. Ciric	Art Unit 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/17/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/EP03/04605, filed on May 2, 2003.

Drawings

2. The drawings were received on December 17, 2004. These drawings are hereby approved.

Specification

3. The abstract of the disclosure is objected to because it does not avoid phrases which can be implied (i.e., "The invention relates to") and also because it does not avoid legal phraseology normally reserved for claims (i.e., "said"). Correction is required. See MPEP § 608.01(b).
4. The disclosure is objected to because of the following informalities: the specification does not include the proper section headings (see below); and, claim 1 is referred to in the second paragraph on page 3.

Appropriate correction is required.

5. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.

Art Unit: 3744

- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A “Sequence Listing” is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required “Sequence Listing” is not submitted as an electronic document on compact disc).

Claim Objections

6. Claims 1 through 12 are objected to because of the following informalities, for example: “the fluid state” [claim 1, line 2] should be replaced with “a fluid state”; “at least one” should be inserted immediately preceding “fluid medium” [claim 1, line 4, BOTH occurrences]; “a” should be inserted immediately preceding “bypass channel” [claim 1, line 9]; “the” should be inserted immediately preceding “inlet chamber” [claim 1, lines 12-13]; “the” should be inserted immediately preceding “outlet chamber” [claim 1, line 13]; “the” should be inserted immediately preceding “through bores” [claim 4, line 2]; “interior” should be inserted immediately preceding “passage” [claim 5, line 2]; “is mounted for each passage (13)” [claim 6, line 2] should be replaced with “for each passage (13) is mounted”; “a” should be inserted immediately preceding “pressure

Art Unit: 3744

control mechanism” [claim 8, lines 2-3]; and, “(21)” should be inserted immediately following “passageway” [claim 11, line 1] Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1 through 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, and are written in a generally run-on fashion, thus failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

For example, it is not clear to which previously recited elements the term "them" [claim 1, line 6] refers, thus rendering indefinite the metes and bounds sought by the claims. The term “them” should be replaced with a direct recitation of the elements referred to thereby. Another appearing in the claims which similarly adds to the indefiniteness of the claims includes is the term “which”, which is repeatedly used in the claims, often separated by many words from the element or elements to which it appears to be intended to refer.

Also, for example, there is insufficient antecedent basis in the claims for the following limitations in the claims: “the other medium” [claim 1, line 6]; “the end areas adjoining the inlet chamber (1) and the outlet chamber (3)” [claim 3, lines 2-3]; “the area

Art Unit: 3744

opposite the return valve” [claim 9, line 2]; “the passages” [claim 10, line 2; claim 11, line 3]; and, “the respective pressure control mechanism” [claim 12, lines 1-2].

Also, for example, it is not clear to which one of the previously recited two interior passages the limitation “the passage (13)” [claim 7, line 2] refers, thus further rendering indefinite the metes and bounds of protection sought by the claims.

Also, the limitations “is in the form of an elongated groove (21) made in such sealing plates (15) which extends over the ends of the passages (13) present in the flat tube (9)” appearing in lines 2-3 of claim 11 are not clear at all as written, and render claim 11 generally incomprehensible as written. It is not clear at all, for example, whether these limitations are intended to convey that the elongated groove or such sealing plates extend over the ends of the passages, nor whether these limitations are intended to convey that the elongated groove or the ends of the passages are present in the flat tube.

9. Claims 2 through 7, 10, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the one(s) between the hollow cast element in the form of a flat tube and any one of the elements of the heat exchange device previously recited in claim 1 from which claim 2 depends.

10. Applicant is respectfully advised to fix all indefiniteness problems in the claims, whether or not these have been specifically pointed out hereby.

Claim Rejections - 35 USC § 102

Art Unit: 3744

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. As best can be understood in view of the indefiniteness of the claims, claims 1 through 10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Langerer & Reich GmbH & Co. (DE 42 32 366 A1, made of record via IDS).

Langerer & Reich GmbH & Co. discloses a device for heat exchange essentially as claimed, including, for example: a heat exchanger block having an inflow chamber 12 on one side and an outflow chamber 13 on the other side of the block; fluid paths 14 extending from the inflow chamber 12 to the outflow chamber 13 and separated from each other by air flow paths formed by fins 34 and 35 arranged therebetween; a cover plate 23 covering the fluid paths 14 and the flow paths and extending from the inflow chamber 12 to the outflow chamber 13, the cover plate comprising at least one through channel 43 [column 6, lines 26-28; also note that the alternative embodiment of Figures 8 through 10 shows two through channels] ; and, at least one pressure- and/or temperature-responsive pressure-limiting device 24 in the form of a non-return valve having a spring-loaded seat.

The reference thus reads on the claims.

13. The non-application of prior art against claim 11 at this time should not be construed as an indicator of allowable subject matter in the claims but rather as an indicator of the extent of the indefiniteness of the claims, and of claim 11 in particular.

Conclusion

Art Unit: 3744

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Ciric whose telephone number is 571-272-4909. The examiner works a flexible work schedule but can normally be reached on most days during the work week between the hours of 10:30 a.m. and 6:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J. Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ljiljana (Lil) V. Ciric/
Primary Examiner, Art Unit 3744